

**Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554**

<i>In the Matter of</i>)
)
Proposed Changes in the Commission's Rules)
Regarding Human Exposure to) ET Docket No. 03-137
Radiofrequency Electromagnetic Fields)
)

REPLY COMMENTS OF THE BLUETOOTH SIG

The Bluetooth Special Interest Group (SIG) is a trade association comprised of leaders in the telecommunications, computing, automotive, industrial automation and network industries that is driving the development of Bluetooth wireless technology, a low cost short-range wireless specification for connecting mobile devices and bringing them to market.

The Bluetooth SIG, Inc., representing over 2400 companies participating in the development, manufacture or sale of Bluetooth-enabled devices, appreciates this opportunity to comment on previous replies to the Commission's request for a review of Modification of the Commission's Rules regarding Human Exposure to Radiofrequency Electromagnetic Fields. This Commission's continuing commitment to facilitating innovation and eliminating regulatory barriers is in no small way responsible for the increasingly important role that unlicensed devices play in the lives of individuals and American business. The Bluetooth SIG asks only that the Commission continue to facilitate innovation in the future as it has in the past.

In this proceeding, the Bluetooth SIG urges the Commission to take into consideration our reply comments as detailed below.

I. The Bluetooth SIG and the Bluetooth Standard

The Bluetooth SIG is an association of companies that oversees the development of the Bluetooth standard. It is sponsored by Agere, Ericsson, IBM, Intel, Microsoft, Motorola, Nokia, and Toshiba, and has more than 2,400 other member companies. The Bluetooth SIG oversees standards development committees, standards compliance testing, and global promotion of the standard.

The existing Bluetooth communications standard enables the low-cost, low-power wireless transmission of data and voice packets at speeds up to 1 Mbps, and at distances ranging from ½ a meter to 100 meters. Bluetooth enabled devices are now being sold in enormous quantities all across the globe. The technology is used for wireless connections between mobile phones, headsets, and speaker phones for greater safety and convenience while driving. It is used for cordless connections between computers and printers, and wireless networking from laptops to the Internet via cell phone or access point. It is also being used for synchronizing a variety of communications devices.

II. Clarification on the Output Power Technology

The Bluetooth SIG supports the comments¹ made by several companies requesting a clarification with respect to the terminology used to describe the output power. We agree with the suggested wordings of “maximum time-averaged conducted power” and “maximum time-averaged ERP/EIRP”. In that the “maximum time-averaged” equals the maximum power level from the handset or maximum total power from base station averaged over 30 min (since this is the SAR averaging time) and “maximum peak output power” to state that exclusions be based on “maximum average root mean square (RMS) output power.”

¹ TIA in comment number 12; Nokia Inc. in comment number 16; Motorola Inc. in comment number 27; The Wi-Fi Alliance comment in number 36; Dell Inc. in comment number 50

III. Proposed Power Threshold Levels

The Bluetooth SIG supports the comments² made with respect to proposed threshold levels. The approach to have different threshold levels for different device categories; radiotelephones, laptop computers and PDAs as suggested by the Commission will make requirements unduly burdensome and complex. We furthermore conclude that with the current trends of digital convergence more and more often digital devices cross the borders between device categories and making the specific device category definitions, usage scenarios and different related criteria less relevant. We suggest that the proposed 100 mW be applied for all three device categories. We conclude that with 100 mW we also gain consistency with the rules that the Commission has proposed in paragraph 18 with respect to SAR evaluations for portable devices.

IV. Requirements for SAR Evaluation for Section 15.247 Unlicensed Devices

The Bluetooth SIG supports the comments³ made with respect to routine evaluation of Section 15.247 Unlicensed Devices. This is unnecessarily cumbersome in light of the more efficient and equally effective self-certification process. In order to continue to facilitate innovation in the future the Commission is encouraged to adopt rules permitting manufacturers of Section 15.427 devices to self-certify compliance with the Commission's RF exposure guidelines.

² T-Mobile USA Inc. in comment number 9; Ericsson Inc. in comment number 32

³ T-Mobile USA Inc. in comment number 9; Ericsson Inc. in comment number 32

V. Comments with respect to 2 mW Threshold Value, with respect to Transmitting Modules

The Bluetooth SIG supports the comments⁴ made with respect to the 2 mW threshold value, with respect to transmitting modules used in mobile phones, laptops and PDAs. The suggested threshold value would force routine re-evaluation of all Class 2 Bluetooth and similar modular transmitters with Bluetooth class 2 devices which have 1 mW nominal output power and 2.5 mW maximum output power. We rather recommend harmonization for both integrated and added low power transmitters with EU standards (EN 50360 and EN 50371), which specifies 20 mW as the threshold value below which lower power devices are deemed compliant without testing.

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Respectfully submitted, January 7th 2004



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⁴ Nokia Inc. in comment number 16; Ericsson Inc. in comment number 32,